

NAME \_\_\_\_\_

DATE \_\_\_\_\_

## SIMILAR TRIANGLES: Worksheet 4

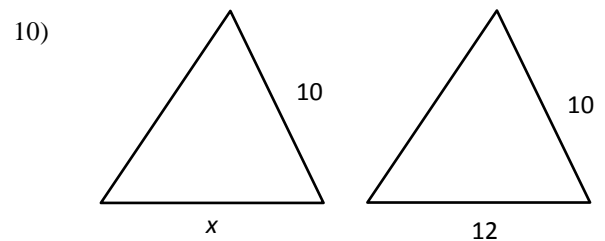
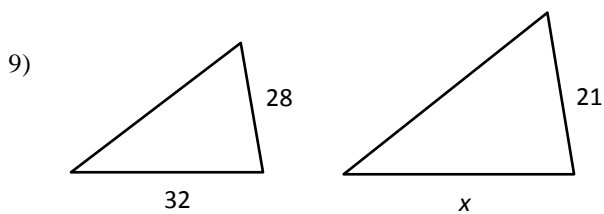
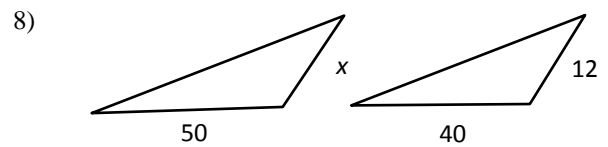
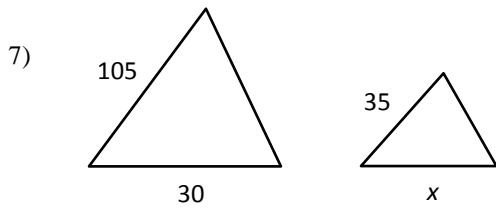
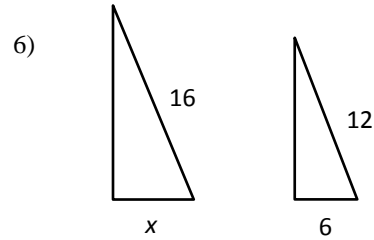
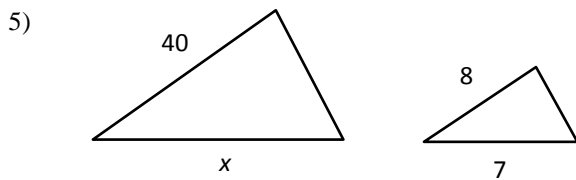
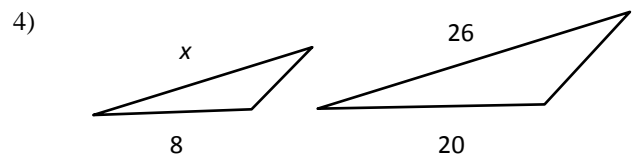
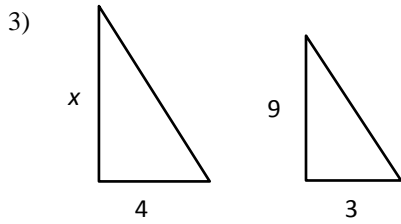
Solve the following proportions for  $n$ .

1)  $\frac{16}{n} = \frac{5}{8}$

2)  $\frac{2.2}{11} = \frac{n}{20}$

Find  $x$  in the following pairs of similar triangles. Triangles are not to scale.

**Proportions may vary to solve for answer.**



**KEY**  
SIMILAR TRIANGLES: Worksheet 4

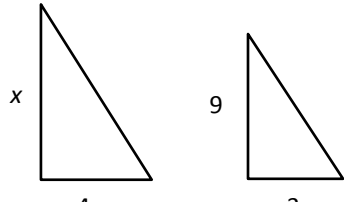
Solve the following proportions for  $n$ .

$$2) \quad \frac{16}{n} = \frac{5}{8} \quad n = (16 \cdot 8) \div 5 = 25.6$$

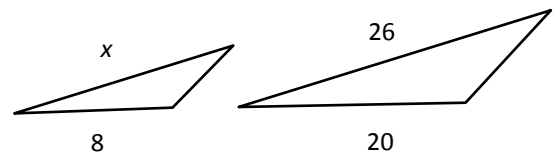
$$2) \quad \frac{2.2}{11} = \frac{n}{20} \quad n = (2.2 \cdot 20) \div 11 = 4$$

Find  $x$  in the following pairs of similar triangles. Triangles are not to scale.

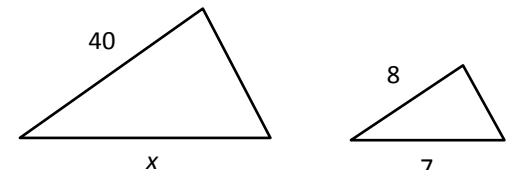
**Proportions may vary to solve for answer.**

3) 

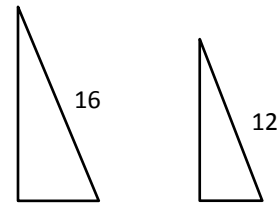
$$\frac{x}{9} = \frac{4}{3} \quad x = (9 \cdot 4) \div 3 = 12$$

4) 

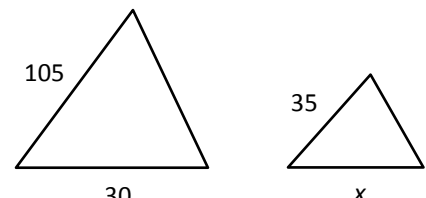
$$\frac{x}{26} = \frac{8}{20} \quad x = (26 \cdot 8) \div 20 = 10.4$$

5) 

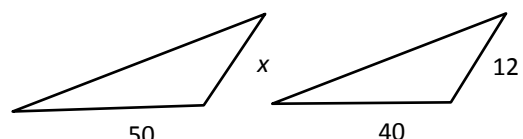
$$\frac{40}{8} = \frac{x}{7} \quad x = (40 \cdot 7) \div 8 = 35$$

6) 

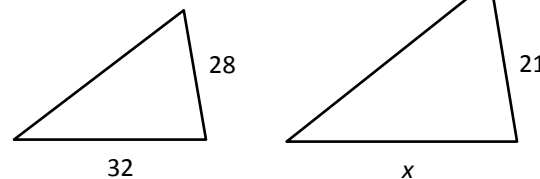
$$\frac{16}{12} = \frac{x}{6} \quad x = (16 \cdot 6) \div 12 = 8$$

7) 

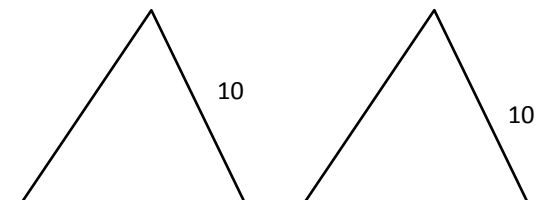
$$\frac{105}{35} = \frac{30}{x} \quad x = (35 \cdot 30) \div 105 = 10$$

8) 

$$\frac{x}{12} = \frac{50}{40} \quad x = (12 \cdot 50) \div 40 = 15$$

9) 

$$\frac{28}{21} = \frac{32}{x} \quad x = (21 \cdot 32) \div 28 = 24$$

10) 

$$\frac{10}{10} = \frac{x}{12} \quad x = (10 \cdot 12) \div 10 = 12$$